

## Building on berries

Alfa Laval fruit processing solutions for the berry industry



## Harvesting maximum value

#### Full value

The juice industry is highly competitive. Being able to supply the juice with the highest, most consistent quality always gives you a commercial advantage, whatever the market conditions.

Alfa Laval can provide the entire range of equipment for high-efficiency processing of berry crops, designed to make sure you consistently get full value from every type of berry you wish to process – fresh and frozen.

Strawberries, blackberries, sour cherries, raspberries, blackcurrants and aronia berries are just a small selection of the crops you can take in for processing when using Alfa Laval equipment.

#### Making the most of your best

Our advanced technology and designed-for-hygiene installations help you process berry crops (and other fruits, if you wish) into the highest quality juice.

We help you make sure of producing juice with the best possible colour, aroma and taste. And with consistent quality standards that both your business partners and end users can depend on, right down the supply chain.

#### **Reputation counts**

Alfa Laval processing know-how and practical experience extend over the full spectrum of berries, fruit and vegetables grown in all the climate zones of the world.

The Alfa Laval name is an international heavyweight in processing technologies, helping smooth your path to plant approval and certification.

#### Hygiene

Processing berries and other crops into juices for quality-conscious consumers all over the world means an effective end-to-end hygiene regimen is crucial.

Alfa Laval berry processing equipment can be designed to comply with the most stringent quality standards you can encounter in worldwide markets, including all relevant EU legislation and US FDA requirements.

### Use Alfa Laval equipment in your berry processing set-up to

- consistently get the most and the best – out of the berries you process
- achieve maximum versatility, so you are not dependent on any specific crops
- ensure exceptional plant reliability and stringent hygiene management
- make sure your plant is easy to extend, to comply with your changing needs.





#### Example of a high-quality continuous berry juice concentrate line



The berries are de-stemmed, de-stoned (where appropriate) and crushed before rapid heating and cooling, using Alfa Laval ViscoLine<sup>™</sup> tubular heat exchangers, to preserve quality.

The stabilized juice is then treated with enzymes to increase the yield, before being passed to high-hygiene Foodec decanter centrifuges that extract the juice from the mash.

This is followed by treatment to remove pectin and starch. The depectinized juice then undergoes clarification in an Alfa Laval membrane filtration system prior to concentration using AlfaVap cassette evaporators. This takes place at a low temperature and with short residence time, to ensure the best possible juice quality.

Special Alvac aroma recovery systems are used to capture the aromas.

The resulting juice concentrate is normally pasteurized with an AlfaTherm unit before being aseptically packaged in bag-in-box containers.



#### End-to-end consistency

Natural variation in the crops, as well as the effects of climate, weather and transport, means the berries delivered to your plant have different specifications from one delivery to the next.

Alfa Laval systems and know-how help you identify and deal with such differences effectively, ensuring you consistent processing results.

#### Versatility and expandability

All berry harvests are seasonal. To keep your revenue flow even, your processing set-up therefore has to be as versatile as possible, to help ensure you a relatively constant supply of different berries (or other fruit).

Alfa Laval berry processing equipment is designed to make it easy for you to deal with seasonal fluctuations, extend your capacity, widen the range of crops your plant can process and integrate new features and equipment - as and when the need arises.

And with Alfa Laval equipment you can expand and upgrade with hardly any disturbance to your processing flow, so that revenue keeps rolling in.

#### Hands-on help

We have a 40-year track record of providing the berry processing industry with practical, hands-on help, backed by the benefits of all the R&D resources, materials technology and specialist know-how available from a major international specialist like Alfa Laval.

We help you avoid unscheduled stoppages and downtime, so you can keep your berry processing running non-stop. We also have experts ready to respond quickly and effectively should any glitches occur.

#### Alfa Laval equipment for berry processing includes

- De-stemmer and de-stoner (for cherries)
- Crusher
- ViscoLine tubular heat exchanger
- Mash enzyme treatment tank
- Foodec decanter centrifuge
- Depectinization tank
- Alfa Laval membrane filtration system
- AlfaVap cassette evaporator
- Alvac aroma recovery system
- BaseLine/FrontLine plate heat exchanger
- AlfaTherm pasteurizer
- Aseptic bag-in-box filler
- Disc stack centrifuge
- AlCip cleaning module
- Sanitary flow handling and tank cleaning equipment
- Flow control and automation systems.

All are backed by a full range of training and support services.



# SUCCESS in berry processing...

... requires making sure your customers can provide end users with hygienically processed, premium-quality juice products – every time.

You can depend on Alfa Laval berry processing solutions to help you satisfy your customers' expectations – with premium efficiency, and for as many crops as you wish.

### Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions. Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

#### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

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